





BUREAU OF SOILS AND WATER MANAGEMENT

Knowledge Management and Decision Support for Sustainable Land Management: The Philippine Experience

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PRESENTATION OUTLINE

- INTRODUCTION WHY KM AND DECISION SUPPORT ON SLM?
- WHERE ARE THOSE SLM PRACTICES?
- WHAT SLM KM TOOLS?
- FRAMEWORK THE KM AND DS PROCESS APPLICATION
- DEVELOPMENT OUTPUTS?
- HOW TO COMMUNICATE RESULTS?
- CONCLUSION

WHY KNOWLEDGEMENT & DECISION SUPPORT?

- The Philippines is one the countries susceptible to extreme climate events and various forms of land degradation.
- Sustainable land management (SLM) is at the heart of land degradation neutrality strategies;
- But, they are not well recognized, adopted and shared despite the wealth of knowledge on SLM
- There is a knowledge gap; it is not used to make decision.
- Need to document this SLM knowledge, put in a database, and process into a decision support tool



WHERE ARE THOSE SLM PRACTICES?

	Coast (0-10 masl)	Lowland (<100 masl)	Upland - Hillyland (100-500 masl)	Highland (>500 masl)			
L	Lowest lowland area (< 3%)	Level to nearly leve (0- 3%) - Very good land	Gently sloping, to rolling (8-18%) (Upland) - Modified	No Slope Criteria, Suitable for forest, and wild	llife as		
	lechnology Functions within the landscape						
	(34 SLM Technologies and 9 Approaches)						
	X	5			e soil		
					ng,		
	1. Soil Fertility Management						
	 Water Management Rupoff Management and Eracion Control (Structural management) 						
	5. Runon Management and Erosion Control (Structural measures)						
	 Runoff Management and Erosion Control (Vegetative measures) 						
	5. Enrichment Planting and Protection of Vegetative Cover						
	 Fire and Wind Breaks Biological Pest Control 						
					Cold St		
					Safe		

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LANDSCAPE ASSESSMENT

WHAT KM TOOLS?

WORLD OVERVIEW OF CONSERVATION APPROACHES AND TECHNOLOGIES (WOCAT) TOOLS AND METHODS

- Building on existing wealth of knowledge
- Understanding local adaptations and innovations
- Assessing SLM impacts
- Providing options for spreading

A common platform for SLM knowledge management >>>

 Recognized by the UNCCD as "the primary recommended database for reporting SLM Best Practices"



THE KM – DS PROCESS



DEVELOPMENT OUTPUTS

Project Web site

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PhilCAT-SLM Landing Phil61T SLM

Conservation measure & stages of intervention

Structural Measures: Mitigation/reduction and rehabilitation

Technical function Water harvesting nd increase water supply

innited water supply Conservation measure & stages of Technical function intervention Structural Measures: Prevention and rhabilitation

Members SLM Practices Guidelines Contact

Water harvesting/ increase water supply; Control dispersed runoff, retain/trapped; contol concentrated runoff: retain/trap.

Establishment input and cost per ha

Establishment Activities: Clearing, staking and laying out; Stripping and excavation; embankment filling; pipe lay out and installation; riprapping; concrete works, embankment sodding; and canal excavation and lining. Establishment inputs and cost per ha of service area: Labor - 105,000 P/ha; Materials - 99,000 P/ha; 96,000 P/ha; Total Cost - 300,000 P/ha. Maintenance/recurrent costs (Embankment maintenance, appurtenant structures maintenance, canal maintenance): Labor - 12,000 P/ha-year; Minor equipment - 3,000 P/ha-year; Total maintenance cost - 15,000 P/ha-year

Assessment of the technology Ecological benefits Offsite benefits Production and socio Socio-cultural benefits (3.22 - 4.25)(2.67 - 4.04)economic benefits $(2.68 \cdot 4.40)$ (2.52 - 3.97) 4.04 4.26 3.62 4.05 High Medium High High

Total benefits (11.09 - 16.66)15.97

High

Full details: 🖬 🏳

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Establishment input and cost per ha

Establishment activities: 1) Laying-out & staking; 2) Clearing; 3) Excavation; 4) Spreading of fill materials; 5) Embankment filling and compaction; 6) pipe laying out and setting; and 7) canal/spillway construction. Total construction cost -40,000 - 100,000 P/unit.

Assessment of the technology							
Production and socio economic benefits (2.68-4.40)	Socio-cultural benefits (2.52 - 3.97)	Ecological benefits (3.22 - 4.25)	Offsite benefits (2.67 - 4.04)				
4.03	3.40	3.96	3.97				
High	Low	Medium	Medium				
Total benefits (11.09 - 16.66) 15.36 Medium							
Full detai	ls: 😈 🔎	@ 1684 hits					



DEVELOPMENT OUTPUTS

Philippine SLM Case Studies.....

n Approach In Improving Biophysical

velopment Corporation (2015).

ws (2015).

015)-

Philippine Case Studies on Sustainable Land Management Approaches and Technologies



Philippine Overview of Conservation roaches and Technologies



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MESSAGE

t (SLM) pra deg ulated skills. Along

corts t plogies (PHILCAT), Research (BAR), mu this project of compiling thes eau of Agri inely nt (BSWM), the L ney could be es so that th philipp

SLM practic - c chi set fitting SLM practices for diverse local conditions can be a and the SLM practices for diverse local conditions can be a together and formatting local experiences and his compendium of tried and tested SLM practicesth shared v alders But by putting together But by studies, this compe

Congratulations to the "SLM Team" for coming up with this very important publication that serves as a "blue print" for the successful adoption of SLM practices in specific cosystems and climate types. Jook forward to receiving updated editions from time to time as land users discover new innovations that need to be more widely disseminated and implemented.

EMMANUEL F. PIÑOL Secretary



DEVELOPMENT OUTPUTS

 IEC Materials produced in English and three major local dialects



HOW TO COMMUNICATE RESULTS?



Presentation of outputs during the Island -wide technical briefing for the Local Government Units (LGUs), Seminars, Fora and Farmers' Trainings

CONCLUSION

- The Philippines has a wealth of SLM knowledge both indigenous or traditional knowledge and science-based knowledge scattered around the country – model farms;
- Application of this knowledge remains low and slow
- The KM DS Framework which we adopted can provide a catalytic process to reach our planners and local leaders for a more informed decision making on which SLM practices would be more appropriate
- Needs R & D and capacity building for more SLM adaptation
- Inputs to ambitious transformative program in the landscape towards achieving land degradation neutrality (LDN) !!



EXERY SLM PRACTICE ... COUNTS!

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